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January 8, 1999

HAND DELIVERY

Magalie Roman Salas
Secretary
Federal Communications Commission
1919 M Street, N.W.
Room 222
Washington, D.C. 20554

Re: *Ex Parte* Presentation
CC Docket No.s 95-20, 98-10

Dear Ms. Salas:

In conformity with the Commission's rules, enclosed please find four copies of a written *ex parte* presentation for inclusion in each of the above-referenced dockets.

Should you have any questions concerning this matter, please contact the undersigned directly.

Sincerely,

Mark J. O'Connor
Counsel for the Commercial Internet
eXchange Association

/mjo
Enclosures

January 8, 1999

HAND DELIVERY

Mr. John Reel
Common Carrier Bureau, Policy Division
1919 M Street, N.W.
Room 534-T
Washington, D.C. 20554

Re: Ex Parte Presentation
CC Docket No.s 95-20, 98-10

Dear Mr. Reel:

On behalf of the Commercial Internet eXchange Association, this letter is to provide you with information concerning the growth of the Internet Service Provider industry.

Ten years ago, in 1988, there was no commercial ISP industry (that is, interconnected commercial companies using TCP/IP). At that time, there were non-academic and research networks (BITNET/FIDONET etc.) using protocols in the TCP/IP "family" as well as thousands of "bulletin boards" (BBS) but there was not a commercial industry nor a retail market for Internet services. Companies using proprietary protocols, represented primarily by CompuServe, Prodigy and AOL, attracted consumers to the "on-line services" environment.

The Proliferation of ISPs in the United States

Commercial ISP interconnection history really starts in 1991 when PSINet, UUNET, and CERFnet decided to interconnect their networks at the Commercial Internet eXchange Association (CIX) for that purpose. This encouraged the entry of a number of companies into the market in the United States and the interconnection of these networks with networks outside of the U.S. There were a few hundred CIX members at the beginning of 1995, almost half of which were non-US based networks. At the beginning of the US NSF-sponsored Network Access Point transition from NSFnet in April 1995, CIX estimates that there were hundreds of small and regional Internet Service Providers.

Commercial Internet eXchange Association
1039 Sterling Road, #201 Herndon, Virginia 22070 Tel: +1 703 709 8200 **Fax: +1 703 709 7699 info@cix.org**

The first formal counts of ISPs began in 1996, with an estimated 2000 commercial ISPs in the U.S. Many of these companies were "garage" or "bedroom" ISPs run by a single person, many arising from the BBS industry.[1]

In the Spring of 1997, there were approximately 14,000 Internet Points of Presence ("POPs"), representing approximately 3500 ISPs.[2]

In the Fall of 1997, there were approximately 5000 ISPs representing almost 40,000 dial-up access points in the United States. Two hundred companies represented three-quarters of these access points, and 2,500 of those ISPs had only one access point. [3]

By the Spring of 1998, there were almost 55,000 ISP access points and approximately 6,000 ISPs in the US; one-half of those ISPs had only one access point.[4] As of the end of 1998, the number of ISPs in the US had risen to 6,500. This number has remained stable and is about the same to date, reflecting the balancing of new entrants against mergers, acquisitions, and companies going out of business.[5]

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1 See www.thedirectory.org.

2 Shane Greenstein, "Universal Service in the Digital Age: The Commercialization and Geogrphy of US Internet Access," (January 21, 1998) *found at*, http:// skew2.kellogg.nwu.edu/~greenste/ research/.

3 Shane Greenstein and Tom Downes, "Universal Access and Local Commercial Internet Markets," (June 8, 1998) *found at*, http:// skew2.kellogg.nwu.edu/~greenste/ research/.

4 See Shane Greenstein and Tom Downes, "Do Commercial ISPs Provide Universal Access?" (December 2, 1998), *and*, Shane Greenstein, "The Tale of Two Frontiers in the Commercial Internet Access Market," (October 25, 1998), *found at*, http:// skew2.kellogg.nwu.edu/~greenste/ research/.

5 See www.thedirectory.org.

Small Business Status of the ISP Industry

The ISP industry is primarily made up of small and very small businesses. As noted, in the Fall of 1997, 200 companies provided three-quarters of the dial-up access in the U.S., and remaining half of the industry provided only one point of dial-up access. A CIX survey in early 1997 confirmed that the industry at the time comprised primarily very small businesses with revenues of less than $1 million and with a handful of employees.[6] In 1999, of the 6500 ISPs, only a few are publicly-traded companies. The majority are still privately-held small and very small businesses. However, the majority of competitive Internet access provision to "non-urban" areas is provided by these entrepreneurial companies.[7]

I hope that this information is helpful to your understanding of the Internet service provider industry. Please feel free to contact CIX if you wish to discuss the industry, or have other questions or comments. In accordance with the Commission's *ex parte* rules, four copies of this letter will be filed today with the Secretary's office for inclusion in the above-referenced dockets.

Sincerely,

By: Barbara A. Dooley

Barbara A. Dooley
Executive Director
Commercial Internet eXchange
Association

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6 "Internet Service Provider Survey" (March 1997), *attached to*, Comments of the Commercial Internet eXchange Association, CC Dkt. No. 96-262, 94-1, 92-213, 96-263 (filed March 24, 1997).

7 Shane Greenstein, "The Tale of Two Frontiers in the Commercial Internet Access Market," (October 25, 1998), *found at*, http:// skew2.kellogg.nwu.edu/~greenste/ research/.

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November 1998

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